



Proven performance

SELF-COMPACTING LIQUID ANHYDRITE FLOOR SCREED FOR UNDERFLOOR HEATING

The challenge

This bespoke new-build home was being constructed to a very high specification and the quality of the finish and energy efficiency of the building were both key priorities. There was a large floor area and the main contractor needed a floor screed that could be installed quickly and deliver the high thermal conductivity performance required by the under-floor heating system. The floor area covered approximately 200m² and required floor screed ranging in depth from 40mm to 65mm. The experienced screeding contractor, Max Pump, had successfully used Tarmac's TOPFLOW liquid screeds on previous developments and chose TOPFLOW Screed A Thermio+ for its high thermal conductivity and free flowing, self compacting properties that would allow fast installation and deliver an excellent finish.

Our solution

TOPFLOW Screed A is available in a number of alternative mixes with specific performance characteristics to match the challenges faced by the contractor. As a flowing, self-compacting screed it can be rapidly pumped into place over large floor areas and can receive foot traffic within 24-48 hours allowing other trades to continue working. TOPFLOW Screed A Thermio+ offers a higher thermal conductivity than conventional sand-cement screeds. It is the only thermal screed with a guaranteed minimum thermal conductivity backed by BBA of 2.5 W/m.K. and comes with a Thermal Performance Certificate that guarantees an uplift in thermal performance of at least 0.5 W/m.K. It can also be laid thinner, down to just 20mm in depth and fully encapsulates heating pipes without leaving any voids. This makes it

ideal for use with underfloor heating systems where it helps to reduce warm up times and improve the thermal performance and energy efficiency of buildings.

Results and benefits

As planned, 10m³ of TOPFLOW Screed A Thermio+ was supplied to this development in two vehicle loads and installed in less than 90 minutes, representing a major time saving compared to a conventional sand-cement screed which would have taken several days. Technical support was provided by Tarmac's experienced Technical Sales Representative to make sure that the client got the best possible finish. All TOPFLOW Screed A products are made from gypsum and are completely cement free, with a binder made from 98% recycled material. This gives it a lower carbon footprint than a

conventional cement-based screeds, saving up to 20.45kg CO₂e per m².

The client and contractor were delighted with the result and the contractor planned to use TOPFLOW Screed A on other sites: “We complete jobs ranging from 25m² - 1,000m² so Tarmac ‘s TOPFLOW screed range has all of our needs covered” Max Biddle, Director, Max Pump

